ABSTRACT OF THE DISCLOSURE

The invention relates to a method and apparatus for controlling the dissociation of water into hydrogen and oxygen, the method including contacting a quantity of aqueous liquid with a quantity of dissociation initiating material in a reaction vessel; monitoring the temperature and/or pressure in the reaction vessel; monitoring the surface area of dissociation initiating material in contact with the aqueous liquid; and controlling the surface area of dissociation initiating material in contact with the aqueous liquid in response to the temperature, pressure, or both, or changes therein, or both, in the reaction vessel.